

REMARKS

The Non-Final Office Action, mailed December 19, 2008, considered and rejected claims 24-32, 34, and 36. Claims 24 and 34 were objected to because of informalities. Claims 24, 25, 27-32, 34, and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnett (U.S. Patent No. 6,772,157) hereinafter *Barnett*, in view of Schmuck (U.S. Patent No. 6,021,508) hereinafter *Schmuck*. Claim 26 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Barnett* in view of *Schmuck*, further in view of Anglin (U.S. Publ. No. 2004/0199521) hereinafter *Anglin*.

By this amendment, claims 24-26, 34, and 36 are amended and claims 37-43 are new.¹ Claims 29-32 are cancelled. Accordingly, claims 24-28 and 34-43 are pending of which claims 24 and 34 are the independent claims at issue.

The invention is generally directed to zone based security administration for data entities. For example, claim 24 recites a method of splitting the one or more non-overlapping security zones into a plurality of non-overlapping security zones to facilitate more efficient delegation of administrative rights to principals. Claims 1 recites identifying a grouping of data items and method items in the combined item hierarchy for which new common security rules are to be enforced. The identified grouping of data items and method items are currently included in an existing non-overlapping zone from among the one or more non-overlapping zones. Existing common security rules are enforced within the existing non-overlapping zone and the new common security rules differing from the existing common security rules.

A processor re-configures the one or more non-overlapping security zones so that administrative rights can be delegated at a granularity that is finer than an entire database but yet coarse enough so as to not require delegation for each item. Re-configuring includes splitting the existing non-overlapping security zone into a new non-overlapping security zone and a remnant of the existing non-overlapping security zone. The arrangement of the new non-overlapping security zone relative to the remnant of the existing non-overlapping security zone is based on the location of the identified grouping of data items and method items within the combined item hierarchy. The new non-overlapping security zone is for containing the identified grouping of

¹ Support for the amendments to the claims are found throughout the originally filed specification and previously presented claims, including but not limited to paragraphs [022], [023], [032]-[041], [062] and Figures 1, 2, 3, 4, and 6.

data items and methods items. The remnant of the existing non-overlapping security zone contains at least one data item or method item from the existing non-overlapping security zone. Accordingly, splitting is restricted in such a way as to prevent overlapping between security zones and such that none of the data items and method items are included in more than one security zone. Re-configuring also includes adjusting data properties of each of the items in the identified grouping of data items and method items to represent that the identified grouping of data items and method items are contained in the new non-overlapping security zone.

For any principals that had existing administrative rights in the existing non-overlapping security zone based on the existing common security rules being enforced in the existing non-overlapping security zone at the time the existing non-overlapping zone was split, those administrative rights are retained. Thus, the administrative rights are retained in the identified grouping of data items and methods items, subsequent to splitting the existing non-overlapping security zone and subsequent to adjusting data properties to represent that the identified grouping of data items and methods items are contained in the new non-overlapping security zone. Claim 1 then recites specifying that one or more additional principals have other administrative rights in the identified grouping of data items and method items based on the new common security rules. Rights in the data items and methods items are specified by specifying that the one or more additional principals have the other administrative rights to the new non-overlapping security zone in accordance with the new common security rules, the other administrative rights differing from the existing administrative rights.

Claim 34 is a computer program product claim corresponding to the method of claim 24.

Applicants respectfully submit that the cited art of record does not anticipate or otherwise render the amended claims unpatentable for at least the reason that the cited art does not disclose, suggest, or enable each and every element of these claims.

Barnett describes delegated administration of information in a database directory. A delegated administration tool comprises a domain definition component that enables an administrator to define a community of users and divide it into at least one administrative domain. Each administrative domain is defined to include a group of users that form the domain. (Abstract and Col. 8, ll. 8-16). Administrators with delegation authority can also use the domain definition component and the administration privileges component to define sub-domains and rights within those sub-domains. (Col. 8, ll. 41-50).

An administrative domain is a managed object that comprises a set of users, a set of user attributes which can be modified, and a set of allowable values for those data fields over which and administrator has authority. (Col. 5, ll. 9-12). An administrator that has delegation authority over a domain can delegate authority further, for example, as a sub-domain. (Col. 6, ll. 19-23). However, an administrator can not change the nature of an operational domain. For example, an administrator may not add or remove attributes from the domain and may not include or exclude users by defining additional rules or patterns. Also, an administrator may not delegate authority to a user that is outside the operational domain. (Col. 6, ll. 53-63).

A database directory contains the various information for users in all of the domains that form a community. The database directory can include a variety of different types of user data. The database directory can also include information of physical devices and services. (Col. 4, ll. 24-38, Col. 9, ll. 57-59, and Col. 10, ll. 1-19). An administrator can access the database directory to create sub-domains, assign a user authority for a domain, administer domain parameters, edit query rules for a domain, modify or delete authority for a domain, edit user's attributes for a domain, view a user's attributes for a domain, and delete users for a domain through a user interface. (See Figures 7-14d).

However, *Barnett* is silent with respect to the organizational structure of the data within the database directory. That is, *Barnett* indicates different types of data in database directory 52, but does not provide an indication of the arrangement of different portions of data relative to one another. Applicants submit that the arrangement in Figures 1 and 2 is essentially an organization chart of a user community, but does not indicate how data within each sub-domain (which is stored in the database directory) is arranged. Further, even assuming *arguendo* that Figures 1 and 2 do represent an arrangement of data in a database directory, there is no indication that different sub-domains can be grouped across different portions of the organizational chart for more efficient administration of the user community. For example, there is no indication that local clinic, radiology, and hospital can be grouped and/or administered in a uniform manner. Conversely, *Barnett* teaches that a user community for Medical Services Provider X is subdivided so that administration can be delegated the user community.

Schmuck describes a parallel file system and method for independent data login. Multiple different file systems can utilize disks in a parallel manner. However, *Schmuck* fails to compensate for the deficiencies of *Barnett*.

Accordingly, the cited are fails to teach or suggest, either singly or in combination:

...

an act of the processor re-configuring the one or more non-overlapping security zones so that administrative rights can be delegated at a granularity that is finer than an entire database but yet coarse enough so as to not require delegation for each item, including:

an act of splitting the existing non-overlapping security zone into a new non-overlapping security zone and a remnant of the existing non-overlapping security zone, the arrangement of the new non-overlapping security zone relative to the remnant of the existing non-overlapping security zone based on the location of the identified grouping of data items and method items within the combined item hierarchy, the new non-overlapping security zone for containing the identified grouping of data items and methods items, the remnant of the existing non-overlapping security zone containing at least one data item or method item from the existing non-overlapping security zone, wherein said splitting is restricted in such a way as to prevent overlapping between security zones and such that none of the data items and method items are included in more than one security zone; and

an act of adjusting data properties of each of the items in the identified grouping of data items and method items to represent that the identified grouping of data items and method items are contained in the new non-overlapping security zone;

for any principals that had existing administrative rights in the existing non-overlapping security zone based on the existing common security rules being enforced in the existing non-overlapping security zone at the time the existing non-overlapping zone was split, an act of retaining those existing administrative rights in the new non-overlapping security zone, including in the identified grouping of data items and methods items, subsequent to splitting the existing non-overlapping security zone and subsequent to adjusting data properties to represent that the identified grouping of data items and methods items are

contained in the new non-overlapping security zone; and

an act of specifying that one or more additional principals have other administrative rights in the identified grouping of data items and method items based on the new common security rules by specifying that the one or more additional principals have the other administrative rights to the new non-overlapping security zone in accordance with the new common security rules, the other administrative rights differing from the existing administrative rights.

as recited in claim 24, when viewed in combination with the other limitations of claim 24. For at least this reason claim 24 patentable defines over the art of record. For at least this same reason, claim 34 also patentably defines over the art of record. The dependent claims also patentably define over the art of record at least for the same reason as their corresponding base claim.

In view of the foregoing, Applicant respectfully submits that all the rejections to the independent claims are now moot and that the independent claims are now allowable over the cited art, such that any of the remaining rejections and assertions made, particularly with respect to all of the dependent claims, do not need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice, and particularly with regard to the dependent claims.²

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to Deposit Account No. 23-3178: (1) any filing fees required under 37 CFR § 1.16; and/or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

² Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting any official notice taken. Furthermore, although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at (801) 533-9800.

Dated this 18th day of March, 2009.

Respectfully submitted,



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